

REMARKS

At the outset, the Examiner is thanked for the thorough review of the patent application identified above. The Office Action dated June 16, 2003, has been received and its contents carefully reviewed. Claims 1-15 are presently pending in the application. Claims 1 and 9 are independent claims

In the Office Action dated June 16, 2003, claims 1, 2, 5-9, and 12-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,284,558 to Sakamoto (hereinafter "Sakamoto") in view of the related art shown in the application (hereinafter "Related Art") and in further view of U.S. Patent No. 5,227,012 to Brandli (hereinafter "Brandli"). Claims 3, 4, 10 and 11 are objected to as being dependent upon a rejected base claims, but would be allowable if rewritten to in independent form including all of the limitations of the base claims and any intervening claims.

The rejection of claims 1, 2, and 5-8 is respectfully traversed and reconsideration is requested. Claims 1, 2, and 5-8 are allowable over the cited references in that each of these claims recites a combination of elements including, for example, "dry etching the organic insulating film and the inorganic insulating film using a mixed ratio gas that etches the organic insulating film faster than the inorganic insulating film." None of the cited references including Sakamoto, the Related Art, and Brandli, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicant respectfully submits that claim 1 and claims 2 and 5-8, which depend from claim 1, are allowable over the cited references.

Sakamoto is directed to using the step of wet etching to accomplish other steps in the process of making an active matrix LCD device. In a first embodiment, the wet etching leaves a mask behind that can be used to dry etch a SiNx layer, thus saving the step of setting up a separate mask for the SiNx layer. (See Sakamoto, col. 3, ll. 53-61.) Further, in another embodiment, the wet etching of the organic film simultaneously develops a resist layer. (See Sakamoto, col. 4, ll. 53-57.) Sakamoto teaches that the use of a wet etching step can be used to accomplish other steps in the manufacturing process, therefore the use of wet etching is essential to the teaching of Sakamoto. There is no teaching of replacing the wet etching step with a dry etching step because this would run counter to accomplishing additional process steps with the wet etching.

Brandli discloses the use of dry etchable organic materials like benzocyclobutene, but there is no teaching that dry etching of these materials can be used to replace the wet etching of these materials and still accomplish the additional steps described in Sakamoto. Therefore there is no motivation to combine Brandli with Sakamoto, and Sakamoto teaches away from this combination because doing so would not accomplish the purpose in Sakamoto of using the wet etch process to accomplish other process steps. Further, neither Sakamoto or Brandli teach using a dry etchant that etches an organic insulating film faster than an inorganic insulating film.

The rejection of claims 9 and 12-15 is respectfully traversed and reconsideration is requested. Claims 9 and 12-15 are allowable over the cited references in that each of these claims recites a combination of elements including, for example, "dry etching the first insulating film and the second insulating film using a mixed ratio gas that etches the second insulating film faster than the first insulating film." None of the cited references including Sakamoto, the Related Art, and Brandli, singly or in combination, teaches or suggests at least this feature of the claimed invention. The arguments related to claim 1 above likewise apply to claim 9. Accordingly, Applicant respectfully submits that claim 9 and 12-15, which depend from claim 9, are allowable over the cited references.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

Dated: September 16, 2003

Respectfully submitted,

By

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